NOTIFICATION. 759

No. L.D. 1407—Legis. 5-52-91, dated Bangalore, 27th November 1952.

Ordered that Notifications Nos. S.O.R. 1885, 1886, 1887, 1888, 1889, 1890 and 1891, dated the 4th November 1952, of the Ministry of Works, Housing and Supply, amending the Indian Boiler Regulations, 1950, published in the *Gazette of India*, Part II, Section 3, dated the 15th November 1952, be republished in the *Mysore Gazette*, for general information.

By Order and in the name of the Rajpramukh,

N. R. JAYA RAO,
Legal Remembrancer and
Secretary to Government,
Law Department.

GOVERNMENT OF INDIA.

MINISTRY OF WORKS, HOUSING AND SUPPLY.

(Central Boilers Board)

New Delhi, the 4th November 1952.

S.R.O. 1885.—In exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (V of 1923), the Central Boilers Board hereby directs that the following amendment shall be made in the Indian Boiler Regulations, 1950, the same having been previously published as required by sub-section (1) of section 31 of the said Act, namely :—

After clause (*b*) of regulation 348 of the said Regulations, the following clause shall be inserted, namely :—

"(*c*) Cold drawn pipes shall be carefully annealed throughout their length after the operation of drawing."

[No. M/BL-304(71)/51.]

S.R.O. 1886.—In exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (V of 1923), the Central Boilers Board hereby directs that the following amendment shall be made in the Indian Boiler Regulations, 1950, the same having been previously published as required by sub-section (1) of section 31 of the said Act, namely :—

In sub-clause (*a*) of regulation 36 of the said Regulations, for the figures "0·045" and "0·04", the figures "0·05" shall be substituted in both places.

[No. M/BL-304(72)/51]

S.R.O. 1887.—In exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (V of 1923), the Central Boilers Board hereby directs that the following amendment shall be made in the Indian Boiler Regulations, 1950, the same having been previously published as required by sub-section (1) of section 31 of the said Act, namely :—

In clause (*a*) of regulation 392 of the said Regulations, for the word "Extensive", the word "Major" shall be substituted.

[No. M/BL-304(1)/52]

S.R.O. 1888.—In exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (V of 1923), the Central Boilers Board hereby directs that the following amendment shall be made in the Indian Boiler Regulations, 1950, the same having been previously published as required by sub-section (1) of section 31 of the said Act, namely :—

In the said Regulations—

1. In regulation 5 after clause (iii), the following clause shall be inserted, namely :—

"(iv) when the material and the make of steam pipes have not been supported by certificates from the manufacturers or apporved Test House, the pipes shall be treated as wrought iron lap-welded pipes and they shall be presented for a hydraulic test before erection *in situ*".

2. In clause (*c*) of regulation 381, for the words " and may issue a provisional order under section 9 of the Act, in Form V" the sentence " a provisional order under Section 9 of the Act in Form V may be issued after the hydraulic test " shall be substituted.

[No. M/BL-304(12)/52]

S.R.O. 1889.—In exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (V of 1923), the Central Boilers Board hereby directs that the following amendment shall be made in the Indian Boiler Regulations, 1950, the same having been previously published as required by sub-section (1) of section 31 of the said Act, namely :—

Regulation 165 of the said Regulations shall be lettered as clause (*a*) of regulation 165 and in clause (*a*) as so lettered after the words " The thickness of the " the word " forged " shall be inserted : and

after the said clause as so lettered the following clause shall be inserted in regulation 156, namely :—

"(*b*) The thickness of Stand Pipes and Branches secured to drums and headers by expanding, screwing or welding shall be not less than that given in table below:—

Minimum Body Thicknesses of Standpipes and Branches Secured by expanding, screwing or welding.

Nominal bore of standpipes and branches	Thickness of shell	Minimum body thickness*
in.	in.	in.
Up to and including 1"1/2 ...	1/2 and over	1/4
Over 1"1/2 up to and including 3 1/2...	5/8 and over	5/16
Over 2"1/2 up to and including 4"1/2 ...	7/8 and over	7/16
Over 4"1/2 up to and including 8 ...	1 and over	1/2
Over 8 up to and including 10 ...	1"1/4 and over	5/8

*For thinner shells than given above, minimum body thickness not less than one-half the thickness of the shell ".

[No. M/BL-304(8)/52]

S.R.O. 1890.—In exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (V of 1923), the Central Boilers Board hereby directs that the following amendment shall be made in Indian Boiler Regulations, 1950, the same having been previously published as required by sub-section (1) of section 31 of the said Act, namely :—

In regulation 268 of the said Regulations, the following paragraph shall be added, at the end, namely :—

"In the case of drums of 'Composite' construction, *viz.*, part riveted and part welded seams, the test pressure shall be the same as that prescribed for riveted construction, *i.e.*, 1½ times the working pressure (Plus) 50 lbs. per square inch".

[No. M/BL-304(9)/52]

S.R.O. 1891.—In exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (V of 1923), the Central Boilers Board hereby directs that the following amendment shall be made in the Indian Boiler Regulations, 1950, the same having been previously published as required by sub-section (1) of section 31 of the said Act, namely :—

For regulation 4 of the said Regulations the following regulation shall be substituted, namely :—

"*Standard Requirements*

"(4). (*a*) *Material.*—All plates, rivets and bars used in the construction of boilers shall be tested and found to conform with the Regulations hereinafter contained.

(*b*) *Construction.*—All boilers during construction shall be under the supervision of an Inspecting Officer.

(*c*) *Certificates, etc., under section 14 (1) (c) of the Act.*—In advance of or along with an application for registration of a boiler the following certificates and drawings or specifications shall be furnished to the Chief Inspector, namely :—

(i) *A certificate in form II.*—From an Inspecting Authority certifying that the material was tested and the boiler was built under their supervision. Together with such certificate the Inspecting Authority may furnish a Memorandum of Inspection Book in Form I, prepared in the manner prescribed by Regulation 386 in respect of the Inspection of the boiler during construction and the hydraulic test applied on completion.

(ii) *A certificate in form III* of manufacture and test signed by the maker or by a responsible representative of the maker of the boiler containing a description of the boiler, its principal dimensions, particulars of the kind of material used in its construction, the thickness of all plates, the diameter of and method of forming the rivet holes in the shell plates, particulars of any departure from ordinary practice in making the shell such as solid rolling or welding, the hydraulic test to which the boiler was subjected, the intended working pressure, the area of heating surface, the maximum continuous evaporative capacity, the year and place of make, and the works number of the boiler.

(iii) *A drawing or print* to a scale, in the case of large boilers of not less than ¾ inch to the foot and, in the case of small boilers of not less than 1½ inches to the foot, showing the principal dimensions and a longitudinal section and end view of the boiler, and bearing the works number of the boiler and the maker's office stamp. The drawing shall show details of riveting of longitudinal and circumferential seams which pitch of rivets, cross spacing of rivet rows and diameters of rivet holes; the radio of curvature of dished end plates fillets of flanges and corners of bent plates,

and where gusset stays are fitted the number and diameter of rivet holes in each gusset stay.

In the case of water tube boilers, the foregoing scales shall apply to the main boiler drums only, but in addition a general arrangement drawing of the boiler to a scale of not less than ¼ inch to the foot shall be provided.

(iv) *A certificate in form IV* from the steel maker and a certificate from the maker of the plates, rivets or bars, of the nature referred to in Regulations, 26 and 27, respectively. The certificate from the maker of the plates, rivets or bars, shall show the charge numbers, the plate or bar numbers and the number and dimensions of the various plates etc., tested their chemical analysis, their ultimate tensile breaking strength in tons per square inch of section the percentage of elongation and the length on which measured, the number, kind and result of bend or other tests made and the date of tests.

Provided that where an Inspecting Authority furnished a certificate in Form II together with a Memorandum of Inspection Book in Form I in accordance with sub-regulation (c) (i) the certificates prescribed, under clauses (iii) and (iv) need not be furnished to the Chief Inspector when application is made for registration of the boiler. But should any question arise in respect of the fitness of the boilers for the working pressure approved by the Inspecting Authority within a period of three years from the date of their registration, the owner shall if requested by the Chief Inspector obtain and furnish the original documents specified in the said clauses.

In the case of steel made and tested by well-known makers in India or other countries, the certificate of the makers in Form IV as prescribed in Regulation 26 may be accepted in lieu of a certificate from an Inspecting Authority in so far as it relates to testing of steel as specified in Form II.

The Central Boilers Board shall decide whether, for the purposes of this Regulation, the maker is well-known or not*.

(v) In the case of fusion welded and seamless forged drums a certificate from the manufacturer furnishing the results of tests specified in Chapter V in regard to chemical analysis and tensile, bend, izod impact tests.

In the case of fusion welded drums the diagram of welded repairs and temperature charts of heat-treatment shall also be furnished.

NOTE.—For the list of well-known steel makers recognised by the Central Boilers Board see Appendix G.

(8) *Maker's Stamp.*—The boiler shall have stamped upon its front plate in a conspicuous position the following particulars:—

MAKER'S NAME.

Work's Number..... Year of make.....
Tested to.....Lbs..... On.....
W.P.....Lbs.....

Inspecting officer's or
Inspecting Authority's Official stamp

NOTE.—Consequential changes will be made in Forms II, III and IV as per details given below:—

(i) in Form II substitute: Regulation 4 (c) (i) for Regulation 4 (c).
(ii) In Form III substitute: Regulation 4 (c) (ii) for Regulation 4 (c) (d).
(iii) Form IV shall be replaced with the Form IV enclosed herewith.

FORM IV.

Steel maker's certificate of manufacture and results of Tests.

Regulation 4 (c) (iv).

Designation of Rolling Mill——————

We hereby certify that the material described below has been made.....by the.....electric/open hearth, acid/basic process and rolled by us and has been satisfactorily tested in the presence of your Inspecting Officer, or Test House Manager, in accordance with the Standard tests.

Date of tests 19 Signature or Initials.

Ordered by—————— Test House Manager.

Date.....

Order.....Number.

Boiler.....Number.

RESULTS OF TESTS.

Charge Number	Brand and Number.	Part of Boiler	Size of plate and bar			Number of pieces	Tensil breaking strength in tons per sq. inch.	Elongation in inches per cent.	Bend tests	Remarks
			Length Ft. In.	Breadth Ft. In.	Thickness or diameter in 32-nds inch					

Chemical analysis .....

(e) *Certificate for steam pipes.*—A certificate of manufacture and test signed by the maker or a responsible representative of the maker of the steam pipes containing particulars and results of tests of materials used in the manufacture and the make and the hydraulic test of all steam pipes supplied."

[No. M/BL-304 (65)/51.]

A. K. SEN, Secy.
Central Boilers Board.

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